

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION 11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

Reynolds Metals Company dba Alcoa Architectural Products 50 Industrial Boulevard Eastman, GA 31023

Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Reynobond® Composite Wall Panel System

APPROVAL DOCUMENT: Drawing No. MD-002, titled "Reynobond®", sheets 1 through 7 of 7, dated 03/26/2009, prepared by Alcoa Architectural Products, signed and sealed by Lucas A. Turner, P.E., bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Small Missile Impact Resistant

LABELING: Each component shall bear a permanent label with the manufacturer's name, Eastman, GA and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein. RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA renews and revises NOA # 09-0625.01 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Carlos M. Utrera, P.E.

MIAMI-DADE COUNTY APPROVED

Atum) 10/17/2014

NOA No. 14-0811.20 Expiration Date: August 12, 2019 Approval Date: October 23, 2014 Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. MD-002, titled "Reynobond®", sheets 1 through 7 of 7, dated 03/26/2009, prepared by Alcoa Architectural Products, signed and sealed by Lucas A. Turner, P.E.

B. TESTS "Submitted under NOA # 09-0625.01"

- 1. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Small Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of Reynobond® Wall Panels, prepared by Hurricane Test Laboratory, LLC, Test Report No. **0423-0218-06**, dated 04/17/2009, signed and sealed by Vinu J. Abraham, P.E.

- 2. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Small Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of Reynobond® Wall Panels, prepared by Hurricane Test Laboratory, LLC, Test Report No. **0423-0112-07**, dated 04/17/09, signed and sealed by Vinu J. Abraham, P.E.

- 3. Test report on Surface Burning Characteristics of the Reynobond® panels with LDPE core in accordance with ASTM E84-05, prepared by Omega Point Laboratories, Inc., Report No. 8902-118985, dated 06/14/2004, signed by Eric G. Hutchinson.
- 4. Test report on Surface Burning Characteristics of the 4mm PE Reynobond® panels in accordance with ASTM E84-05, prepared by Omega Point Laboratories, Inc., Report No. 8902-122031, dated 11/12/04, signed by Eric G. Hutchinson.
- 5. Test report on Surface Burning Characteristics of the 4mm Reynobond® panels with FR core in accordance with ASTM E84-05, prepared by Omega Point Laboratories, Inc., Report No. 8902-117346, dated 02/06/2004, signed by Guy A. Haby.
- 6. Test report on Self Ignition Temperature for the polyethylene resin in accordance with ASTM D1929, prepared by Polyhedron Laboratories, Inc., report No. 4500317871 dated 07/29/2005, signed by Howard Kaye, Ph.D.

Carlos M. Utrera, P.E. Product Control Examiner NOA No. 14-0811.20 Expiration Date: August 12, 2019

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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS (Cont.) "Submitted under NOA # 06-1025.03"

- 7. Test report on Rate of Burning of Plastics in Horizontal Position for the Reynobond® with Kevlar® wall panel in accordance with ASTM D635-03, prepared by Applied Technical Services, Inc., report No. D103926 dated 07/12/2006, signed by F. Lopez and E.W. Sproat.
- 8. Test report on tensile strength of Reynobond® with Kevlar® wall panel in accordance to ASTM E8, prepared by Q.C. Metallurgical, Inc. Report No. 6HM-680 dated 08/28/2006, signed by Frank Grate, P.E.

C. CALCULATIONS

1. Structural and anchoring calculations prepared by Turner Engineering & Consulting, Inc., dated 06/18/2014, signed and sealed by Lucas A. Turner, P.E.

"Submitted under NOA # 09-0625.01"

2. Structural and anchoring calculations prepared by Milton Cubas, P.E. Inc., dated 03/28/2009, signed and sealed by Milton Cubas, P.E.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS "Submitted under NOA # 09-0625.01"

- 1. Dow Corning® 795 Silicone Building Sealant.
- 2. Dow Corning® 995 Silicone Structural Adhesive.
- 3. Dow Corning® 983 Silicone Glazing and Curtainwall Adhesive/Sealant.

F. STATEMENTS

- 1. Statement letter of code conformance to 2010 FBC and 5th edition (2014) issued by Turner Engineering & Consulting, Inc., dated 08/05/2014, signed and sealed by Lucas A. Turner, P.E.
- 2. No financial interest letter issued by Turner Engineering & Consulting, Inc., dated 08/05/2014, signed and sealed by Lucas A. Turner, P.E.

"Submitted under NOA # 09-0625.01"

3. Statement of compliance with the Florida Building Code prepared by Hurricane Test Laboratory, LLC, dated 04/17/2009, signed and sealed by Vinu J. Abraham, P.E.

Carlos M. Utrera, P.E. Product Control Examiner NOA No. 14-0811.20 Expiration Date: August 12, 2019

Approval Date: October 23, 2014

GENERAL NOTES:

These Reynobond® composite panels shall be used for wall, soffit, canopy or fascia construction, or as cladding system. This system has been tested and designed in compliance with the Florida Building Code 2010 Edition and 5th Edition (2014).

Each actual wall project shall be constructed using the details shown on these drawings as minimum required specifications. Panels can run horizontal or vertical (steel metal frame application must be 90 degree to the stiffener/retainer).

- A METAL SKIN
- 81 82 TIE LAYER BETWEEN SKIN AND CORE
- C CORE POLYMERIC COMPOUND (FR Fire Retardant)

(PE - Polyethylene)

D - FINISH - Reverse Roll Coated Paint

REQUIRED TESTS

DESCRIPTION
a) Test
b) Self Ignition
c) Flame Spread 1
d) Smoke Developed 1
e) Thermal Barrier
f) Interior Finish Application
Fire Test

ASTM E-84
ASTM E-84
ASTM E-19
f) UL 1715

g) Multi-story Fire Test h) Fire Test of Building

Construction & Materials UL 263 R8343

BILL OF MATERIALS

1. PANEL MATERIAL:

Reynobond® metal composite material 4 mm and 6mm thick as manufactured by Alcoa Architectural Products.

- a) FR ALUMINUM PANEL SKIN THICKNESS 0.020" ALUMINUM ALLOY
- b) PE ALUMINUM PANEL SKIN THICKNESS 0.020" ALUMINUM ALLOY
- c) FR ZINC PANEL SKIN THICKNESS 0.028' ZINC ALLOY Rheinzink(R) Titanium Zinc

NOTES: 1) ONLY UP TO 100 PSF,

2) Zinc is NOT a Fire Retardant product per IBC 1407

NFPA 285

- e) PE STAINLESS STEEL PANEL SKIN THICKNESS 0.018" SS ALLOY 304 or 316L
- f) FR STAINLESS STEEL PANEL SKIN THICKNESS 0.018" SS ALLOY 304 or 316L
- g) PE TITANIUM SKIN THICKNESS 0.018", back skin SS ALLOY 304 or 316L
- h) FR TITANIUM SKIN THICKNESS 0.018", back skin SS ALLOY 304 or 316L

2. ALUMINUM EXTRUSIONS:

Aluminum alloy 6063 - T6 Temper, mill finish as manufactured by Alcoa or others.

- a) FRAME (CONTINUOUS)
- b) CLIP (CONTINUOUS)
- c) STIFFENER (CONTINUOUS, max. 2 unit per panel all length @max 20" O.C.spacing)
- d) RETAINER (CONTINUOUS)
- e) CORNER ANGLE

3. METAL STUDS:

16ga galvanized or painted steel (per applicable codes to prevent corrosion); With minimum properties of 50 Ksi yield, 65 Ksi ultimate. (Calculations must be provided by professional Engineer.)

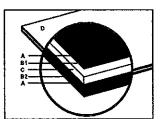
- 4. STUD TO TRACK FASTENERS And ANGLE TO BRIDGING FASTENERS And ANGLE TO STUD FASTENERS #8-18 x 3/7 Phillips Head Galvanized Steel Pan Tek Screw or similar.
- 5. PANEL TO FRAME FASTENERS.

#10 x 1" wafer head, self drilling, self tapping, galvanized steel screw at 16" O.C. All Panel Perimeter Returns.

- HORIZONTAL AND VERTICAL JOINT SILICONE (as needed).
 - a) Dow Corning #995 170 PSI One part.
 - b) Dow Corning #983 170 PSI Two parts.
 - c) Dow Corning #795 100 PSI One part.
- Horizontal, Vertical and perimeter joint Weather seal.
- d) Dow Corning #795 100 PSI One part
- Cap Bead Weather seal.
- e) Dow Corning #795 100 PSI One part Panel to frame, frame and corner weather seal. (Only for dry seal system wet seal do not apply)
- f) Where water intrusion is not required the system can be used as rain screen

No weather silicone will be required - B.O.M. # 06c, # 06d, # 06e, # 07a, # 15

Use stainless steel screw recommended B.O.M. # 05, # 08



7. BACKER ROD. (as needed)

a) 5/8" diameter, open cell. b) 1 1/2" diameter, open cell. c) 2" diameter, open cell.

8. CLIP AND RETAINER TO STEEL SUBSTRATE FASTENER (as needed)

 a) #14 - HEX WASHER HEAD - 1 1/2" - DRILL POINT galvanized TEK Steel or equivalent NOTE: Where two screws are required per location, maintain min. 3/4" on center spacing.

SCREW CHART AND SCHEDULE

Reynobond Product	Substrate Backer	Stud Spacing	Max Screw Spacing	Design Presure PSF	Impact Rating	Building Applicability
Reynobond PE and FR						
Aluminum	Metal Stud 24" O.C. NO Backer Required	24" ⊖C	(1) 24" OC	100		Above 30 Feet Only
Titanium						
Stainless Steel						
Złno**						
Reynobond Zinc only available in FR		16" ○○	(1) 16" ○○	120	Small	
* Reynobond Zinc is not approved	Metal Stud 16" O.C.					
for all applicable installation conditions however, only at a design pressure of 100 psf Note: See B.O.M. # 1c	NO Backer Required		(2) 16" OC	130		

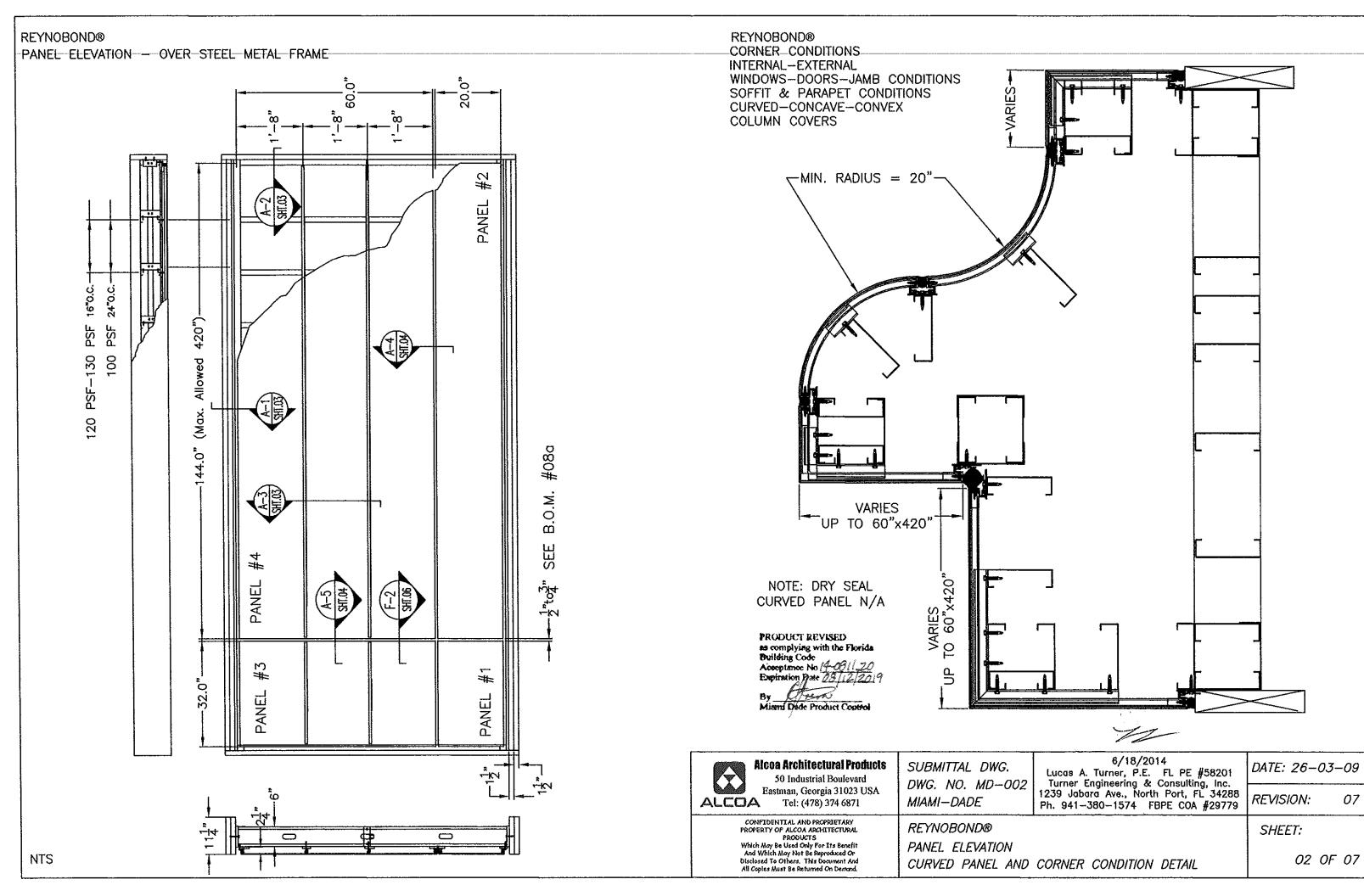
- 9. TRACK TO WOOD FRAME FASTENER. 5/16" x 2.5" galvanized steel LAG screw with washer at 12" O.C. MAX.
- 10. SOUTHERN YELLOW PINE MINIMUM.
- 11. METAL TRACK 16ga galvanized steel or painted (per applicable codes to prevent corrosion) with minimum properties of 50 Ksi yield, 65 Ksi ultimate.
- 12. BRIDGING CHANNEL. 16ga galvanized or painted (per applicable codes to prevent corrosion) steel with minimum properties of 50 Ksi yield, 65 Ksi ultimate. Standard 1/2' flange, 1 1/2' web. WALLS UP TO 10' HEIGHT 1 ROW @ MID-HEIGHT. WALLS EXCEEDING 10' HEIGHT BRIDGING ROW SPACED NOT TO EXCEED 5' 0" O.C.
- 13. UTILITY ANGLE. 16ga galvanized or painted (per applicable codes to prevent corrosion) steel with minimum properties of 50 Kst yield, 65 Ksi ultimate, 2" leg dimensions. (Bridge Clip or equal).
- 14. SHIMS Standard glazing shims as needed.
- 15. Uni-Grip 1/4" neoprene hollow gasket.

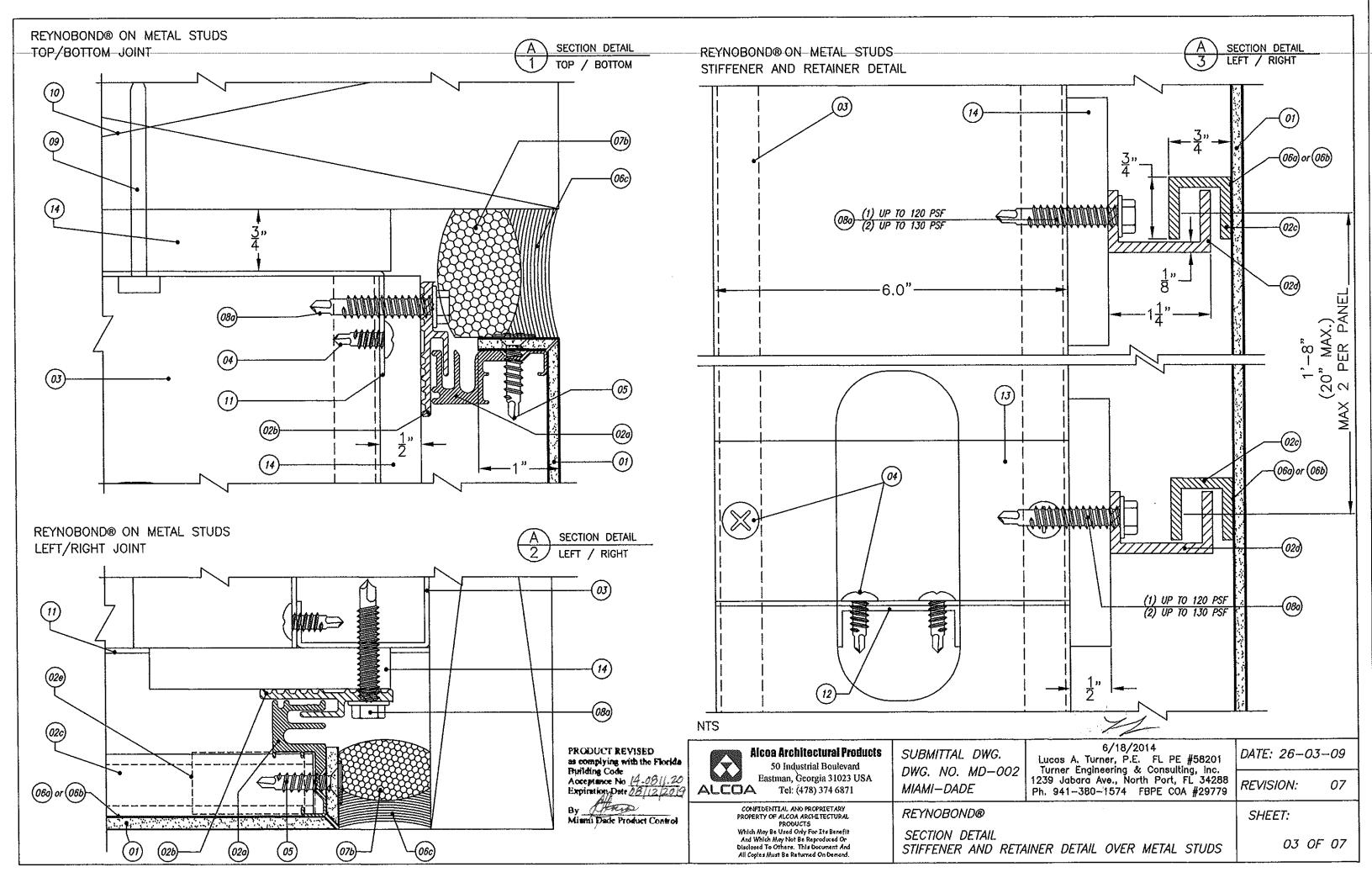
PRODUCT REVISED as complying with the Florida Building Code Acceptance No [4-0911, 20 Expiration Date 08 [12] [20]

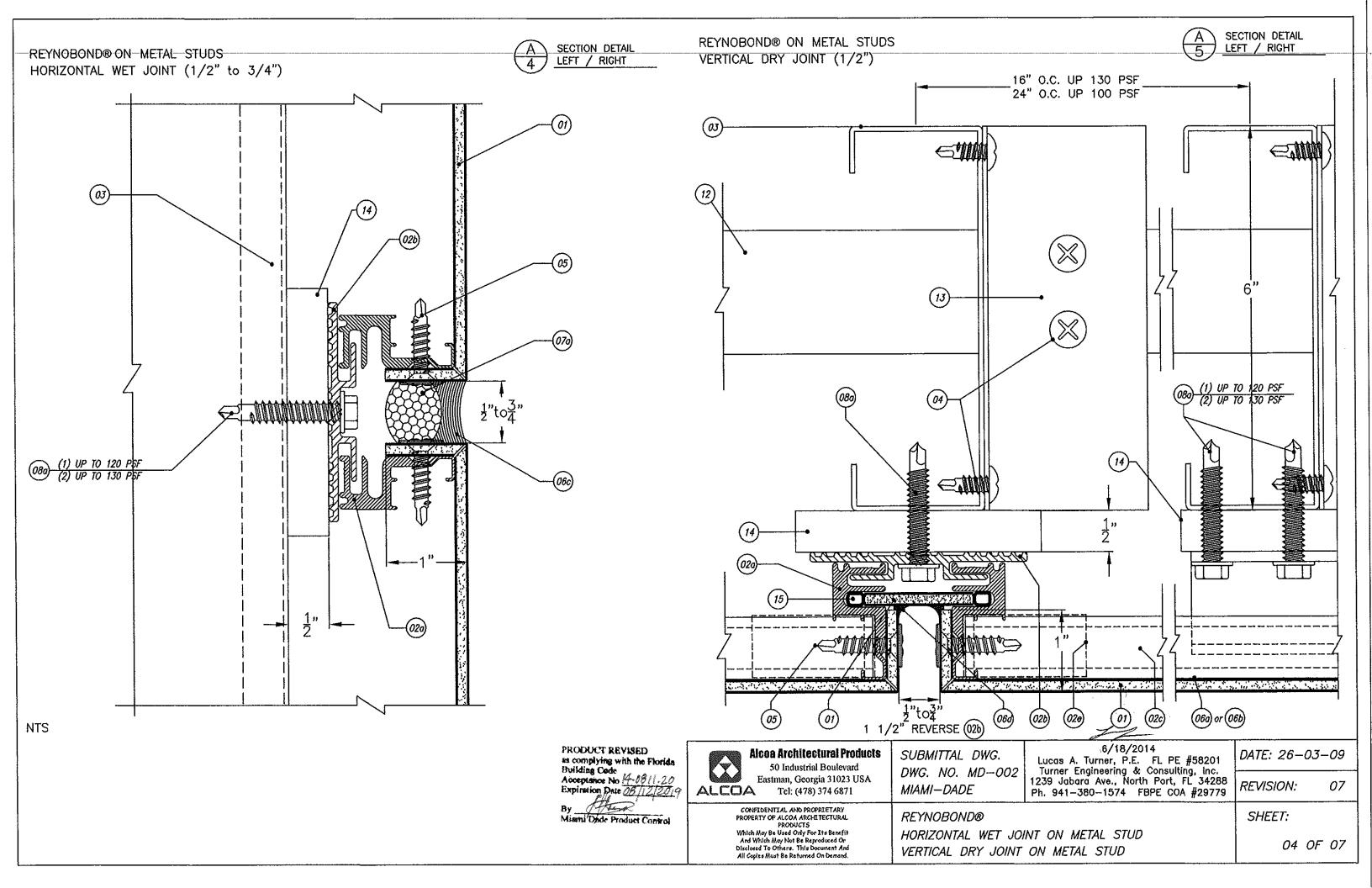
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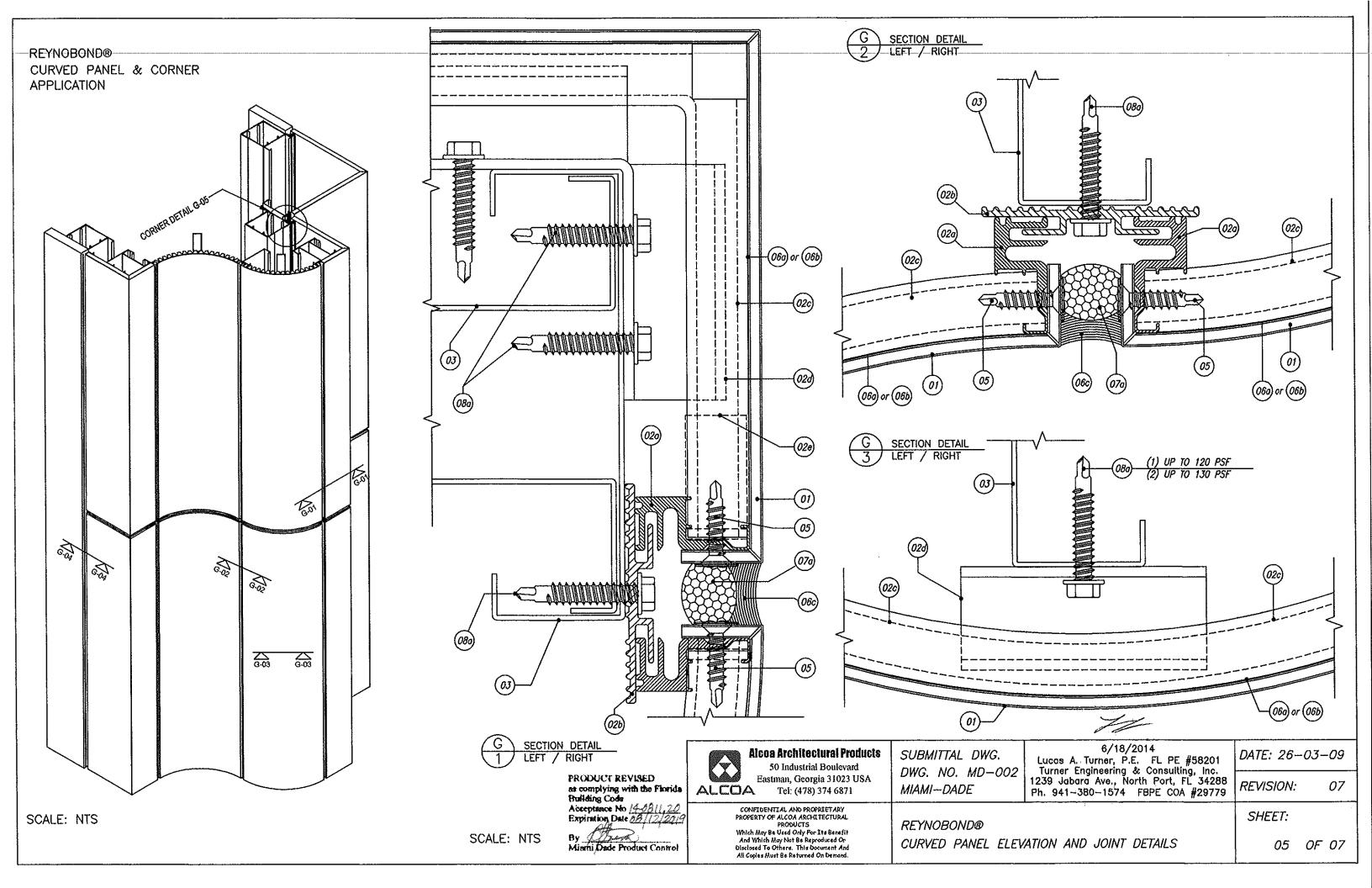
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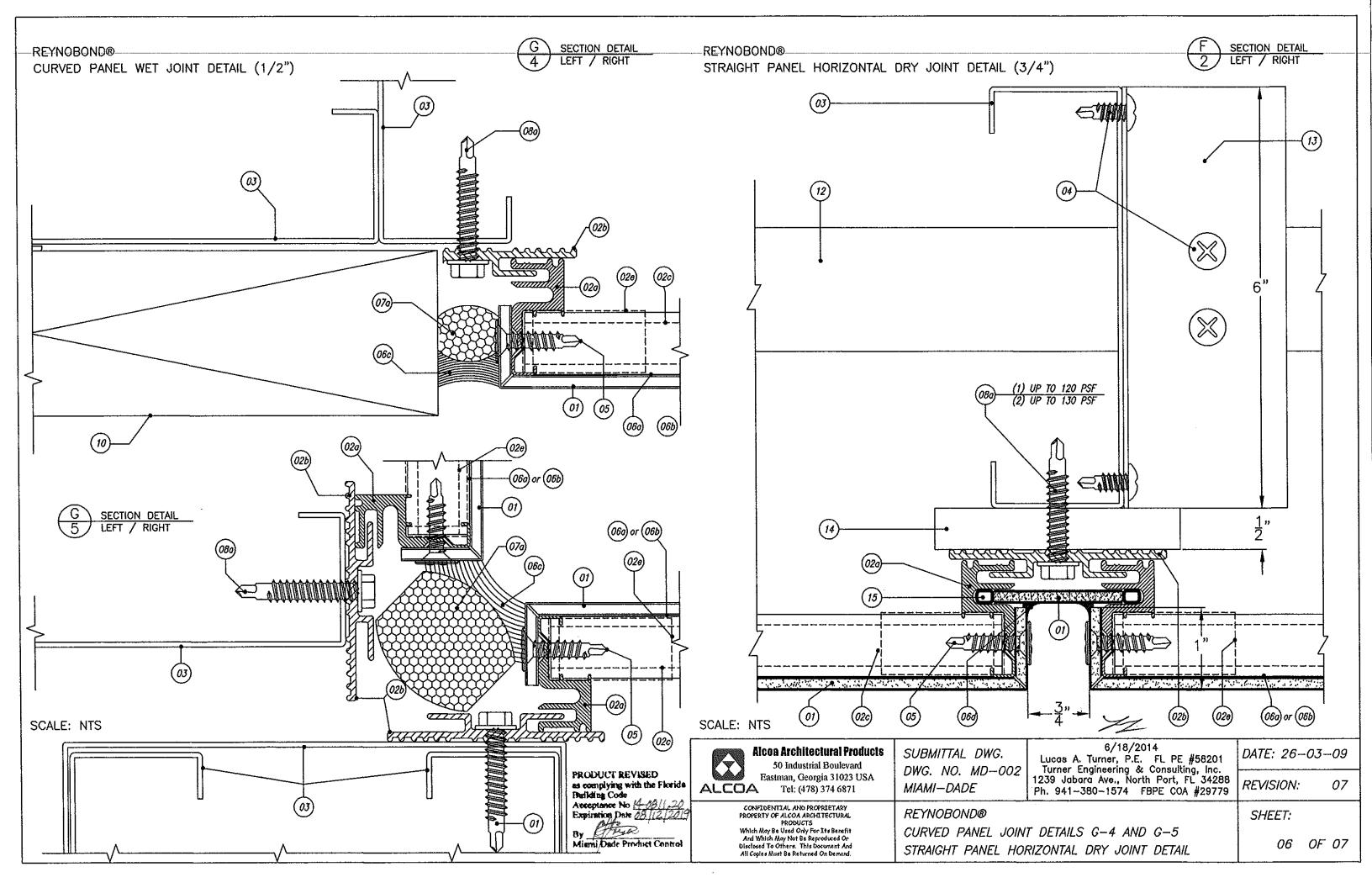
	Alcoa Architectural Products 50 Industrial Boulevard	SUBMITTAL DWG.	6/18/2014 Lucas A. Turner, P.E. FL PE #58201 Turner Engineering & Consulting, Inc.	DATE: 26-03-09				
	Eastman, Georgia 31023 USA ALCCA Tel: (478) 374 6871	DWG. NO. MD-002 MIAMI-DADE	1239 Jabara Ave., North Port, FL 3428 Ph. 941-380-1574 FBPE COA #2977	REVISION:	07			
	CONFIDENTIAL AND PROPRIETARY PROPERTY OF ALCOA ARCHITECTURAL PRODUCTS	REYNOBOND®		SHEET:				
	Which May Be Used Only For Its Benefit And Which May Not Be Reproduced On Disclosed To Others. This Document And All Cooles Must Be Returned On Demand.	BILL OF MATERIALS DESIGN PRESSURES		01	OF 07			



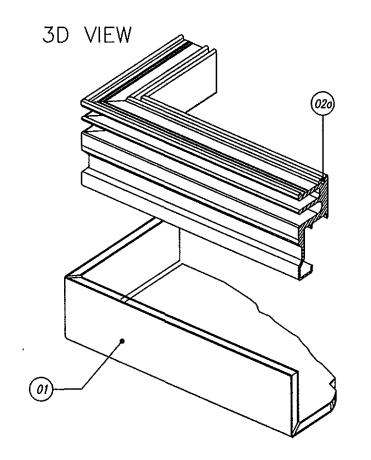


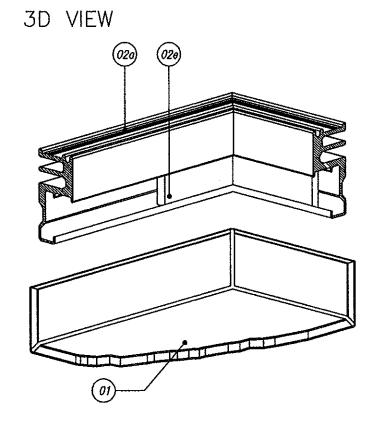


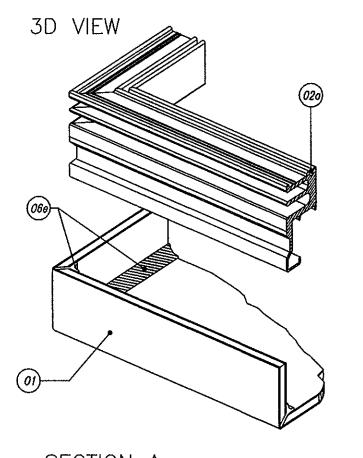


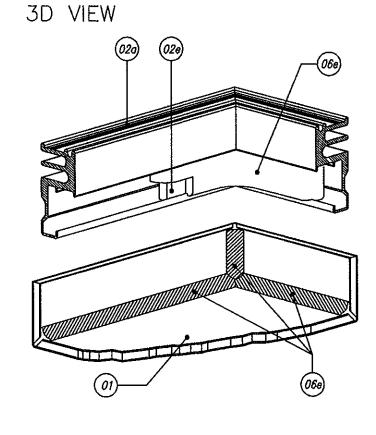


3D VIEW AND SECTIONS - CORNER (ONLY DRY SEAL)

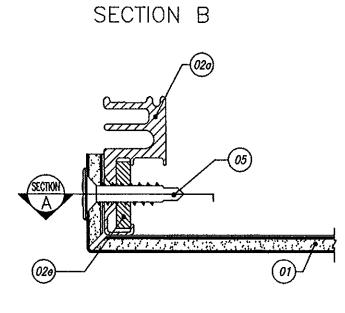


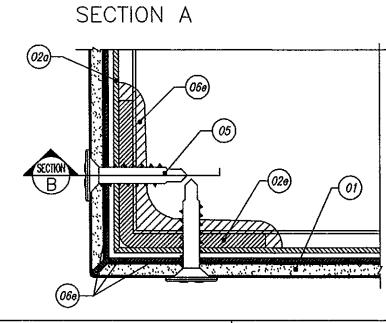


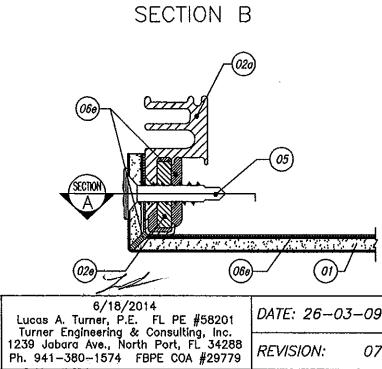




SECTION A







PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 4-1811, 20
Expiration Date 08 112 2019 Miemi Dade Product Control

Alcoa Architectural Products 50 Industrial Boulevard Eastman, Georgia 31023 USA
ALCOA Tel: (478) 374 6871

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MIAMI-DADE REYNOBOND®

SUBMITTAL DWG.

DWG. NO. MD-002

3D VIEW AND SECTIONS -- CORNER FRAME DETAIL DRY AND WET SEAL

DATE: 26-03-09

REVISION:

SHEET:

07 OF 07

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